

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : OLYMPUS OPTICAL CO LTD

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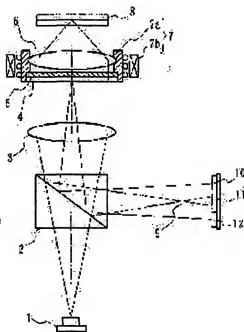
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(54) OPTICAL PICKUP DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an optical pickup device of which the resolution can be enhanced by providing a heat dissipation mechanism in a nonlinear optical element functioning as is the case with a pinhole, and thereby preventing the expansion of the diameter of an opening associated with a temperature rise.

SOLUTION: The optical pickup device is provided with a nonlinear optical element 9 having temperature dependency characteristics in an optical path which guides a return light beam from an optical disk 8 to a photodetector 11 through an objective lens 6, a quarter-wave plate 5 and a hologram element 4 which are supported movably in a radial direction of a medium, and through a beam splitter. In the optical pickup device, the return light beam is received on the photodetector 11 through an opening 9a formed by the return light beam made incident on the nonlinear optical element 9 to reproduce information recorded on the optical disk 8. The nonlinear optical element 9 is provided with a heat dissipation mechanism 13 consisting of a metallic thin film having high light transmittance at a position adjacent to an undersurface including the opening of the nonlinear optical element.



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